

## SUNRICHER



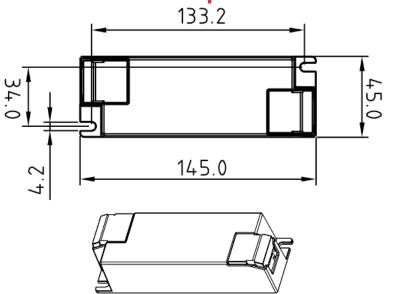
# 36W Compact Constant Current LED Driver with DALI-2 NFC



## Specification

		SRP-2305N-36CC350-1050
	DC Voltage Range	6~54V
	Rated current	350-1050mA via NFC setting; Min.current gear lower to 0.1mA, default 800mA
Output	Current Accuracy	±3%( ±1%@Certain full load) @ full load
	Rated power	36W
	Voltage Range	220-240VAC
	Frequency range	50/60Hz
	Power Factor (Typ.)	> 0.95@230VAC Full load
	Total Harmonic Distortion	THD ≤ 8% (@ full load / 230VAC)
Input	Efficiency (Typ.)	>85% @ 230VAC full load
	AC Current (Max)	0.2A @ 230VAC
	Inrush Current (Typ.)	Max. 5.64A at 230VAC; 72µs duration
	Leakage current	< 5mA/230VAC
	Standby Power Consumption	<0.5W
	Anti Surge	L-N: 2KV
	Dimming Interface	DALI Device Type 6 (DALI consumption < 2mA)/ AC Push
	Dimming Range	0.01%-100% @Max current
Control	Dimming Method	Amplitude/CCR dimming
	Dimming Curve	Linear/Logarithmic optional
	Short Circuit	Yes, recovers automatically after fault condition is removed
Protection	Over Current	Yes, recovers automatically after fault condition is removed
	Over Temperature	Yes, recovers automatically after temperature drop
	Working TEMP.	-25°C ~ +45°C
Environment	Max. Case Temp	TC=85℃
Environment	Working humidity	10%-95% RH (non-condensing)
	Storage TEMP humidity	40°C ~ +80°C, 10% ~ 95% RH
	Safety standards	EN61347-1, EN61347-2-13
	Withstand voltage	I/P-O/P: 3.75KVAC
Safety & EMC	Isolation resistance	I/P-O/P: 100MΩ/500VDC/25°C/70% RH
	EMC emissions	EN55015, EN61000-3-2, EN61000-3-3
	EMC Immunity	EN61547, EN61000-4-2,3,4,5,6,8,11
	Size	145*45*28mm (L*W*H)
Others	Weight	0.20kgs
	Warranty	5 Years
Notes	1. DO NOT install with power applied 2. DO NOT expose the device to mois	

## Mechanical Specification



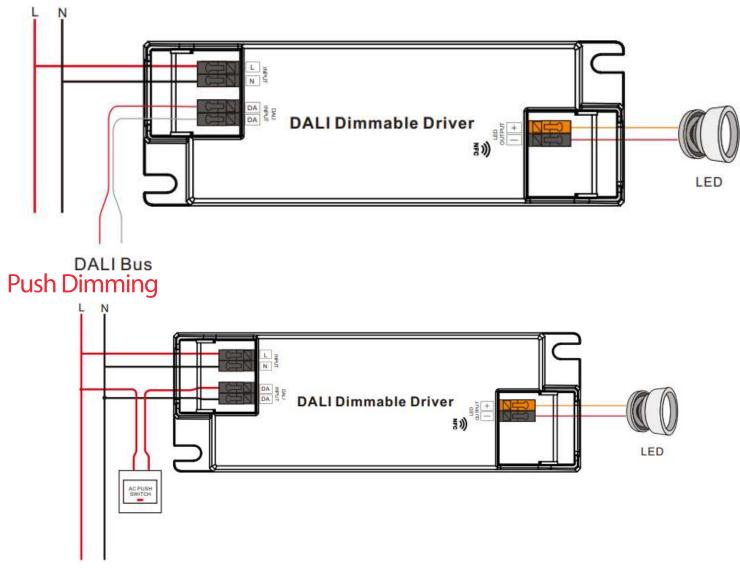
28.0

#### Input Voltage Terminal: 2 pole terminal (same as the diagram)

- DALI or PUSH Dim Terminals: 2 pole terminals
- Output LED's: 2 pole terminal block: Positive (+), Negative (-)

## Wiring Diagrams & Dimming

## DALI



## Operation

#### With DALI Master:

#### 1. DALI Address

- 1 DALI address for 1 channel output are assigned by DALI Master controller automatically, please refer to user manuals of compatible DALI Masters for specific operations

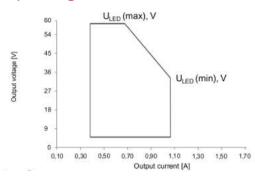
#### With NFC Programming Devices:

#### Note:

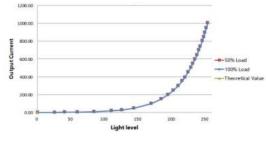
- 1. Do wiring according to the wiring diagram and power on the DALI system
- 2. Recommend setting parameters without power-on the DALI devices
- 3. Please make sure your mobile phone has NFC function and enable it

### Wiring Diagrams & Dimming

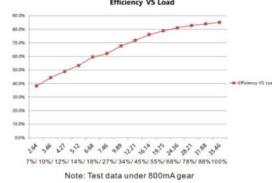
**Operating Window** 

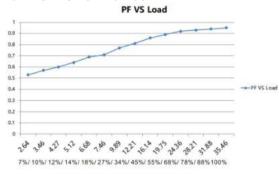


### Dimming Curve



#### Driver Performance Efficiency VS Load

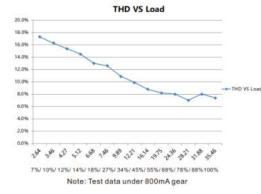




Note: Test data under 800mA gear

#### Driver Performance

**Driver Performance** 



#### Expected Lifetime

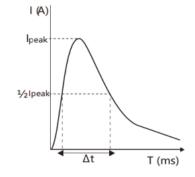
Module Number	Output current	Та	30 °C	40 °C	45 °C	•••	
SRP-2305N-36CC350-1050	350 – 1050 mA	Tc	50 °C	60 °C	66 °C		85 °C
SRP-2309N-36CCT350-1050	350 – 1050 mA	Lifetime	> 100,000 h	> 100, <mark>0</mark> 00 h	> 100,000	) <mark>h</mark>	> 40,000 h

The LED driver is designed for a lifetime stated above under reference conditions .

The relation of tc to ta temperature depends also on the luminaire design.

**MCB Load Quality** 

Module Number	Ipeak	Twidth				Max	c.qua	ntity	ofL	ED D	rive	per	MCB				
		-	B10	B13	B16	B20	B25	C10	C13	C16	C20	C25	D10	D13	D16	D20	D25
SRP-2305N-36CC350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80
SRP-2309N-36CCT350-1050	8.56A	88µs	17	22	28	35	43	28	36	44	56	70	32	41	51	64	80



#### Note:

1. Those MCB parameters are based on ABB S200 series circuit breakers.

2. For different brands and models of miniature circuit breakers, the quantity of drivers will have difference.

3. Please do not exceed the above-mentioned quantity during on-site installation, and the specific load quantity shall be subject to on-site installation.

4. When the installation environment temperature of MCBs exceeds 30°C or when multiple MCBs are installed side by side, the number of mounted drives will be reduced, which requires recalculation.

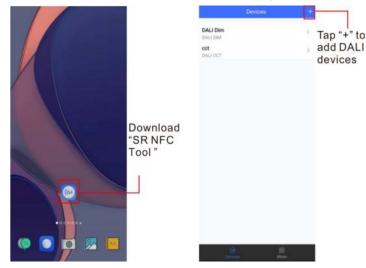
5.Type C MCB's are strongly recommended to use with LED lighting

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## Operation - Working with 'SR NFC Tool' App

Step 1: Download the APP (searching "SR NFC Tool" from App Store and Google Play). Open APP.



Step 2: Add device, and name it as you wish.



Step 3: Unlock device, enter parameters configuring page.

Device Type       DALI DM       Device Type       DALI DM       Unlock it       • Max level         Target current       300.0mA       0ptions       >       • Power on level       9 power on level	4	DALI Dim 2	5	<	DALt Dim 2	ත්		<	Options
Product Id       Options       Options       Prover on level         Target current       300.0mA       0000001       0000001       0000001         Target current       300.0mA >       0000001       0000001       0000001       0000001         Target current       300.0mA >       0000001       0000001       0000001       0000001       0000001       0000001         Target current       300.0mA >       0000001       00000001       0000001	Device Type	DALI DIM	Locked	Device Type		DALI DIM		•	
Target current     SOUCHIA       Target current     SOUCHIA       Target current     SOUCHIA       P System failure level	Product Id	0x01000001		Product Id		0x01000001	OINOCKI		Hill (CYC)
<ul> <li>Short address Groups</li> <li>Fade time Fade rate</li> <li>Dimming curve</li> <li>Scenes</li> <li>Target current</li> </ul>	Target current	300.0mA		Options		>		0	
<ul> <li>Fade rate</li> <li>Dimming curve</li> <li>Scenes</li> <li>Target current</li> </ul>				Target current		300.0mA >		•	
<ul> <li>Scenes</li> <li>Target current</li> </ul>								•	
Target current								•	Dimming curve
								•	Scenes
Low side current error compensation								0	Target current
								0	Low side current error compensation
Set All Attributes Unselect All Select All	Se	et All Attributes		Se	t All Attribute	5			Unselect All Select All

Note:

Ready to Read

e with the back of the device.

- Please make sure that you have enabled NFC function with your mobile phone/ tablet.
- Please make sure that the "NFC position" is matched.
- Please do not power on the device before setting.
- Please If you can't download "SR NFC Tool".
   Please contact with us
- 5. Please refer to QR code below





Notes:

- You have to unlock the device then do some settings
- 2. Only when the corresponding function is selected, the function interface will be displayed.

## Operation

Step 4: Few parameter interface, you can choose the setting based on your requirements.

6	DALJ Dim 2 🗗	C DALI Dim 2	மீ	Cancel P	tower on level Save	Cancel	System failure level	Save	Cancel Fade	rate Save	Gance	6	6	roups		Save
Device Type	DALI DIM	Options	>	Level		Level				_		-	-	100		1120
Product Id	0x01000001	Max level	100.0% >	255 (MASIC		255 0		+	7 (44.7steps/s)	- +	0	2	2	3		5
Options	5	Min level	0.100% >	200 (1000)		255 0					6	7	8		10	11
Max level	100.0% >	Power on level	MASK >		0			-0		15	12	13	14	15		
Min level	0.100% >	System failure level	MASK >	0	255	0		255								
Power on level	MASK >	Short address	.0 >													
System failure le	wel MASK >	Groups	>	Dimming curve		Dimming cu	irve									
Short address	0 >	Fade time Ea	tended fade >	O Logarithmic	C Linear	O Logarith	mic 🔿 Linear									
Groups	3	Fade rate	358uteps/s >													
Fade time	Extended fade >	Dimming curve	Logarithmic >													
Fade rate	358steps/s >	Scenes														
Dimming curve	Logarithmic >	Target current	300.0mA >													
Scenes	3	Low side current error compensation	0.100 >													
Se	All Attributes	Set All Attribute		Read	White	Rea	d W	the	Read	Write		Read			Wri	te

Step 5: After setting, please save the selected configuration via NFC and power on the device

\$	Scenes	Cancel	Target current	Save	< DALF Dir	n 2 eS	C DALLDH
cene 0	level MASK >				Options	- 24	Options
cene 1	level MASK. >	3000		300,0mA 1+0.1mA	Max level	100.0% >	Max level
ene 2	level MASK. >	Value range	1000-50000		Min level	0.100% >	Min level
ene 3	level MASK >						
ene 4	level MASK. >				Power on level	MASK >	Power on level
ene 5	level MASK >				System failure level	MASK >	System failure level
ene 6	level MASK >				Short address	(Ø %)	Short address
me 7	level MASK 3				Groups	: 2.	Groups
ene 8	level MASK 2				Fade time	\$.7a X	Fade time
ne 9	level MASK 3						
me 10	level MASK >				Ready to I	Write	
me 11	level MASK 3				G		0
ene 12	level MASK >					)	(~
ene 13	level MASK >						$\sim$
cene 14	level MASK 2				Touch the device with the device.		Successf
cene 15	level MASK. 2				-		
					Cance	1	
Read	Write	Rev	ad 1	Write	<b></b>	4	h.

#### Notes:

- 1. NFC function doesn't require any power driver
- 2. Many functions can be configured by NFC. Kindly check your desired functions.
- 3. All of our DALI drivers are in the best performance within our DALI master/ gateway

## CLO and Corridor DIM(CD) Function Instruction

Step 1: Open APP, and Find the CLO/CD functions

	6	150 Hane	-13			
n faikure level	100,0%	System failure level	100.0% >			
address	0	Short address	0.2			
4		Groups	2	Cancel	CLO	Save
ime	2.04	Fade time	201.5	-contoor	CLO	Jane
ate	Silatepsh	Fade rate	S-intepuh >			
ing curve	Logaritonic	Denming curve	Logarithmic 3	Constant lun	nen enable	$\odot$
		Scenes	5			
current.	4er0100F	Target current	100.0mA . 3	Working hou	irs	0 hour(s)
um current instation	AMOK	Minimum current compensation	MAR >	Enable	or Disable CLO	function
ant lumen operating	Disabled	Constant lumen operating	Disabled >			
or .	PD mode	Corridor	P0 made >			
Set All Attribut	No.	Set All Altri	DUITHE			

Read From the NFC Driver

Tie

Le

Unlock it, and Click here to enter CLO settings

#### Step 2: Enter CLO Setting homepage

ade :

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inen.	88 1	P	1000			
review text (mail fil) t						
		rine Fann (1914				
nes and l	.evels					
1 roote	2	3	4			
5 Irodhi		2 Tradit				
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Read	4	Write				

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interiorge 1300		

Enable CLO function

Click "1", and set its time and level

System failure level

Short address Groups

Fade time

Fade rate

Dimming curve

Target current

Minimum current

Constant lumen operating

compensatio

Corridor

Preview			
Output level (%)			
10			
-	-		
-			
-			
- 10		All Lines Lines	
Times and I	Levels		
Times and I	2 2000 80%	3 80m 80%	4 400 905
t tao	2		4Den
1 1000 71%	2 2000 80% 8 10040		etien 905

#### Note:

1. Working hours : Ability to calculate the working hours of a single driver

Set your desired time and levels. Graphic display

100.0% >

2.05 >

5.6steps/s >

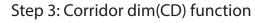
Logarithmic >

100.0mA >

MASK 3

Disabled >

PD mode



System failure level	100.0%
Short address	D
Groups	
Fade time	2.05
Fade rate	5.6steps/s
Dimming curve	Logarithmic
icenes	
larget current	100.0mA
Minimum current compensation	MASK
Constant lumen operating	Disabled
Corridor	PD mode

Read From the NFC Driver

Unlock it, and Click here to enter Corridor mode

1300 236 467

Cancel

Mode

O CD

PD: PUSH DIM

CD: Corridor DIM

Corridor

O PD

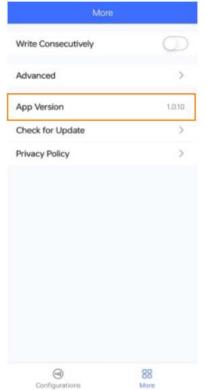
## Operation

#### Step 4: Enter CD Setting homepage

Cancel Corridor Save	Cancel Corridor Save	Cancel Corridor
O CD PD	Occupied time	Prolonged time
Preview and the	120 S Value range 0-60,000	60 s Value range 0-60,000
	Occupied level	) Infinite
10 10 6 Fade in Occupied Fade out Piskinged Dimits off	Value range 0-100	Prolonged level
ade in time	Fade out time	20 % Value range 0-100
5 s	5 S Value range 0-100	Dim to off time
ilue range 0-100	Prolonged time	5 S Value range 0-100
	.40	
Read Write	Read Write	Read Write

- Notes:
- 1. You should select either CD mode or PD mode, but not both.
- 2. Under CD mode, you can realize it with normal (3rd party) AC
- sensor.

## **Additional Information**



 Please make sure your APP version is 1.0.10 or higher.
 Please make sure NFC driver's firmware is available with CLO / CD functions